

MAY. 7. 2003 10:33AM

MBS&S 919 854-1401

NO. 5270 P. 1

**RESPONSE UNDER 37 C.F.R. 1.116 - EXPEDITED
PROCEDURE - EXAMINING GROUP 1754**

Attorney's Docket No. 5051-416DV

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Yakobson
Serial No.: 09/866,021
Filed: May 23, 2001
For: *Physical Property Modification of Nanotubes*

Group Art Unit: 1754
Confirmation No.: 6193
Examiner: Peter J. Lish

OFFICIAL

Date: May 7, 2003

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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MAY 08 2003
GROUP 1700

Sir:

Transmitted herewith is an AMENDMENT in the above-identified patent application.

- Applicant claims small entity status. See 37 CFR §1.27.
 No additional fee is required.

- A check in the amount \$____ to cover the additional fee is enclosed.
 The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0220.
 Any additional filing fees required under 37 C.F.R. § 1.16 for the presentation of extra claims.
 Any patent application processing fees under 37 C.F.R. § 1.17.

Respectfully submitted,

Laura M. Kelley
Registration No. 48,441

Customer Number:



20792

PATENT TRADEMARK OFFICE

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being sent by facsimile transmission to the United States Patent and Trademark Office, Group Art Unit 1754 at (703) 872-9311 on May 7, 2003.

Cary Gregory
Date of Signature: May 7, 2003

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MBS&S 919 854-1401

NO. 5270 P. 2

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AMENDMENT AFTER FINAL

Dear Sir:

In response to the Final Office Action mailed March 7, 2003 (the "Action"), please make the following amendment. A copy of the amendments with the changes shown is attached entitled "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

In the claims:

Please substitute the following clean-format amended claim for the pending claim of like number pursuant to 37 C.F.R. 1.121.

24. (Amended) A carbon nanotube comprising:
a dipole of pentagon-heptagon and heptagon-pentagon dislocation cores located in an opposed spaced-apart relationship along a spiral propagation path along a longitudinal axis of said carbon nanotube;
a first region comprising a domain of modified lattice structure positioned between said dipole and formed by said dipole propagating throughout the nanotube as a result of stress being applied to said nanotube; and
second and third regions each positioned on opposite sides relative to said first region, the second and third regions comprising lattice structure domains which differ from the domain of modified lattice structure in said first region such that said second and third regions possess a physical property different from the first region.